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EXAMINER

POLTORAK, PIOTR

ART UNIT PAPER NUMBER

2134

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/818,358

Applicant(s)

OLSON ET AL.

Examiner

Peter Poltorak

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 and 30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 and 30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group 1 (claims 1-26 and 30) in the reply filed on 11/12/04 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 1-26 and 30 have been examined. Claims 27-29 are pending but withdrawn from examination. Applicant is reminded to cancel claims drawn to an unelected invention.

### ***Claim Objections***

3. Claim 21 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative and cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, claim 21 has not been further treated on the merits.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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Claims 1-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Computer software must be embodied on computer readable media.

Claims 1-26 are directed to non-statutory subject matter. Although the claims are directed to a system and a method for enabling authentication, the steps are not defined in such a way that they could be implemented without the use of computers, e.g. implemented by utilizing pens and paper. As a result, the claims refer to abstract ideas.

Furthermore, several claims refer to an application with modules, library and objects. However, in order to meet the requirement of patentability, software must be embodied on computer readable media. As a result, the claims also lack patentable utility.

4. Claims 1, 3-4, 6-12, 16-17, 19 and 22, 24-26 are rejected by virtue of their dependence.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 6-7 and 13, 18, 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as

to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

6. Claims 6 and 7 discuss “a fifth” and “a sixth data”. However, the specification provides guidance only in regard to “a first”, “a second”, “a third” and “a fourth” data. The specification discusses “a fourth data” being “produced to the web requester” (*the specification, pg. 12 lines 23-24*), which is the same entity that creates the “first data”, and not the authentication module as discussed in the claim language. Consequently, claims 6 and 7 are rejected based on the fact that the specification provides no guidance on implementation of “the fifth” and “the sixth” data.
7. Claims 13, 18 and 23 discuss the invention in relation to the specific authentication protocols e.g. Basic or Kerberos authentication. Furthermore, the claims specify that the authentication challenge is “generated” (*claim 18; claims 13 and 23 use similar terms*). It is not clear how some of the specific protocols (*Basic for example*) can “generate (be /associated/related)” the authentication challenge as discussed in the dependent claim. Basic and Kerberos authentication protocols do not have features that are recited by claims on which claims 13, 18 and 23 are dependent. There no evidence to support the claim language as provided in the applicant's specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 5, 13-15, 18, 23 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention.
9. Claims 13, 18 and 23 discuss the invention in relation to the specific authentication protocols e.g. Basic or Kerberos authentication. Furthermore, the claims specify that the authentication challenge is "generated (/associated/related)" (*claim 18; claims 13 and 23 use similar terms*) by one of these protocols. It is not clear how specific protocols (*Basic for example*) can "generate" the authentication challenge as discussed in the dependent claim. Basic and Kerberos authentication protocol does not have features which are called for by claims on that claims 13, 18 and 23 are dependent and no evidence to support the claim language which is provided in the applicant's specification. For purposes of further examination the examiner treats the claim language used in claims 13, 18 and 23 as though the authentication challenge is generated by a protocol having similar features to one of the recited protocols.
10. The limitation of claims 14-15: "objects/data store and the registrar are distributed to one or more distributed processors" is not understood. It is not clear whether the limitation calls on objects/data store operated on different machine, whether it refers to a machine that has one or more processors, whether it refers to both situations or something else. Similarly the term "distributed processors" is not understood.
11. In claims 5 and 25 the following lack antecedent basis:

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- a. Claim 5: "the cache",
- b. Claim 25: "the newly registered",

Appropriate correction is required.

12. Claims 1, 3-4 and 13-14 are rejected under 35 U.S.C. 102(b) as being

anticipated by *Kessler (Gary Kessler, "Security in Windows NT"*

*<http://www.garykessler.net/library/ntsecurity.html>*).

13. As per claim 1 *Kessler* teaches an authentication challenge, wherein a

windows client receives a first data associated with the communication challenge (*a random number*), which reads on an authentication manager adapted to receive a first data associated with the communication challenge.

The first data is processed into a second data (*random number is retrieved by the client*) related to the first data and the authentication challenge, which is communicated to at least one authentication module (*encryption*). The authenticated module produces a third data related to responding to the authentication challenge (*encrypted random number*) (*Kessler, pg. 3 first § and Figure 1*).

14. *Kessler* also teaches a response to the authentication challenge (*Kessler, expected response, pg. 3 first § and Figure 1*).

15. As per claim 3 the authentication challenge as taught by *Kessler* is a multipart authentication challenge.

16. As per claim 4 *Kessler* teaches an encrypted random number (*Kessler, expected response, pg. 3 first §*).

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17. As per claim 14 (*as best understood*) Kessler teaches distributed computers (*client/server*), which inherently use processors to implement operations.
18. Claims 1, 3-4 and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaeo (*Merike Kaeo, "Designing network security", 1999, ISBN: 1578700434*).
19. Kaeo teaches an authentication challenge (challenge response authentication), wherein a peer receives a first data associated with the communication challenge (*Challenge message*), which reads on an authentication manager adapted to receive a first data associated with the communication challenge. The first data is processed into a second data (*ID, Random #, Timbuktu*) related to the first data and the authentication challenge, which is communicated to at least one authentication module (*Hash Function*). The authenticated module produces a third data related to responding to the authentication challenge (*Hash BADFOOD*) (*Kaeo, pg.46-47, Fig. 2-11*).
20. Kaeo also teaches a response to the authentication challenge (*Kaeo, Fig. 2-11, step 3*).
21. As per claim 3 the authentication challenge as taught by Kaeo is a multipart authentication challenge.
22. As per claims 4 Kaeo teaches deriving hash (*third data*) from the second data (*challenge response, pg.46-47, Fig. 2-11, step 3*).
23. As per claim 13 Digest and NTLM have essentially the same authentication principles as the authentication taught by Kaeo.



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24. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by *Hill (Brett Hill, " IIS 101: The Basics of IIS Authentication ", <http://www.windowsitpro.com/Web/Article/ArticleID/15843/15843.html>)* in light of *Microsoft (Microsoft, "Windows 2000 Server TCP/IP core networking guide", 2000, ISBN: 1572318058)*.

25. *Hill* teaches an NT authentication which employs a browser (*application*) being authenticated while accessing network resources. Receiving, distributing, producing and storing means are inherent in the NT authentication transactions. Also, receiving, distributing and producing means are inherently separate from applications (as illustrated by *Microsoft*, pg. 7) since they operate on different OSI layers.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. Claims 10-12, 15-18, 22-23 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kessler (Gary Kessler, "Security in Windows NT", <http://www.garykessler.net/library/ntsecurity.html>)* in view of *Official Notice*.

27. *Kessler* teaches the authentication challenge and the authentication manager as discussed above. *Kessler* does not explicitly teach a registrar adapted to register an authentication object with the class factory and with the data store.

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Official Notice is taken that it is old and well-known practice to register objects with the class factory and with the data store. One of ordinary skill in art at the time of applicant's invention would employ registering authentication objects with the class factory and with the data store in order for the object to be known and utilized by the system.

28. *Kessler* also does not explicitly teach that the application does not have to be recoded or recompiled to employ the newly registered authentication object.

Official Notice is taken that it is old and well-known practice to use applications that do not have to be recoded or recompiled in order to employ the newly registered object. One of ordinary skill in art at the time of applicant's invention would write an application so that the application does not have to be recoded or recompiled to employ the newly registered authentication object in order not to slow down the application's execution.

29. Claims 8-9 and 19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kessler* (*Gary Kessler, "Security in Windows NT", <http://www.garykessler.net/library/ntsecurity.html>*) in view of *Itoi et al. (Pluggable Authentication Modules for Windows NT)* and in further view of *Official Notice*.

30. As per claim 8 *Kessler* teaches authentication challenge and authentication manager as discussed above. Also, it is implicit that some of the client using the authentication challenge as taught by *Kessler* are Windows 98, NT 2000 (etc.). Windows Operating Systems products are written in object oriented programming language and inherently have a class factory (*Dynamic Link*

*Libraries: DLL*) and objects. *Kessler* does not explicitly teach authentication objects callable by the authentication manager.

*Itoi et al.* teach authentication objects (*Itoi et al.*, section 2) callable by the authentication manager (*Itoi et al.*, Figure 4.2). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement authentication objects callable by the authentication manager into *Kessler's* invention as taught by *Itoi et al.* One of ordinary skill in the art would have been motivated to perform such a modification in order to provide a more efficient programmable environment (*Itoi et al.*, Section 1).

31. Also, per claim 9 *Itoi et al.* teach a configuration table (*Itoi et al.*, section 4).

32. As per claims 19 and 24 *Itoi et al.* show several created authentication modules (Fig. 4.2). Registering one or more authentication modules after the receipt of one or more authentication challenges would be implicit since in order to register the appropriate authentication module the authentication protocol used must be known.

33. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kaeo* (*Merike Kaeo*, "Designing network security", 1999, ISBN: 1578700434) and *Kessler* (*Gary Kessler*, "Security in Windows NT", <http://www.garykessler.net/library/ntsecurity.html>) in view of *van Hoff* (U.S. Patent No. 5822539).

34. *Kessler* and *Kaeo* each teach the authentication challenge wherein a third data related to responding to the authentication challenge is produced, as discussed above.

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*Kessler* and *Kaeo* each do not explicitly teach a cache adapted to store one or more third data related to responding to the authentication challenge.

*Van Hoff* teaches a cache (*van Hoff*, col. 1 lines 52-55). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to utilize a cache in *Kessler* and *Kaeo*'s invention as taught by *Van Hoff*. One of ordinary skill in the art would have been motivated to perform such a modification in order to provide faster response (*van Hoff*, col. 1 lines 52-55).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571)272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

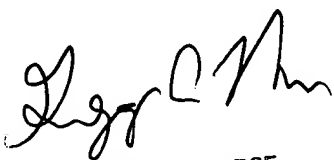
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/3/5  
Signature

  
Date

  
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